

5

APPLICATION

10

FOR UNITED STATES LETTERS PATENT

15

SPECIFICATION

20

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT WE, STEPHEN J. SEELY & SALLY J.

25 SEELY, citizens of UNITED STATES OF AMERICA, have invented a new
and useful SPARE TIRE MOUNTING APPARATUS of which the
following is a specification:

SPARE TIRE MOUNTING APPARATUS

5

BACKGROUND OF THE INVENTION

Field of the Invention

10

The present invention relates to tire mounting devices and more particularly pertains to a new tire mounting device for supporting a spare tire on a receiver hitch of a vehicle.

15 Description of the Prior Art

The use of tire mounting devices is known in the prior art. While these devices fulfill their respective, particular objectives and requirements, the need remains for a device that allows a person to mount 20 a spare tire on a receiver hitch so that the spare tire does not occupy the majority of space found within a pick-up bed.

SUMMARY OF THE INVENTION

25 The present invention meets the needs presented above by generally comprising a mounting including a male hitch coupler and a female hitch coupler that are attached together. The male hitch coupler may be extended into and secured to the receiver hitch such that the female hitch coupler extends away from the receiver hitch. A pole is attached to and extends 30 upwardly from the mounting. The pole has a front side and a back side. The pole has a break therein such that a first portion and a second portion are defined. The first portion abuts the mounting and is hingedly coupled

to the second portion. The hinge is positioned on the front side of the pole. A rod for removably receiving a tire is attached to the pole and extends outwardly away from the front side of the pole. The rod is positioned on the second portion of the pole. The rod is threaded and a
5 threaded locking member is selectively positionable on the rod.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present
10 contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

The objects of the invention, along with the various features of
15 novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

20 The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

25 Figure 1 is a schematic side view of a spare tire mounting apparatus according to the present invention.

Figure 2 is a schematic front view of the present invention.

30 Figure 3 is a schematic cross-sectional view taken along line 3-3 of Figure 1 of the present invention.

Figure 4 is a schematic side view of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to Figures 1 through 4 thereof, a new tire mounting device embodying the principles and concepts of the present invention and generally designated by the reference numeral 10 will be described.

As best illustrated in Figures 1 through 4, the spare tire mounting apparatus 10 generally comprises a mounting including a male hitch coupler 12 and a female hitch coupler 14 that are attached together. The male hitch coupler 12 may be extended into and secured to a vehicle receiver hitch 8 such that the female hitch coupler 14 extends away from the receiver hitch 8. The female hitch coupler 14 is adapted for receiving a male hitch from a trailer or a ball hitch assembly 16.

A pole 18 is attached to and extends upwardly from the mounting 12. The pole 18 has a front side 20 and a back side 22. The pole 18 has a break therein such that a first portion 24 and a second portion 26 are defined, wherein the first portion 24 abuts the mounting. The first portion 24 is hingedly coupled to the second portion 26 by a hinge 28. The hinge 28 is positioned on the front side 20 of the pole 18 so that the second portion 26 may be extended away from the vehicle for the purpose of opening a pick-up bed door. The first portion 24 includes a first section 30 and a second section 32 that are rotatably coupled together. Each of a pair of flanges 34 is attached to one of the first 24 and second 26 sections and are positioned generally adjacent to each other. At least one securing member is removably extendable through each of the flanges 34 for preventing rotation of the first section 24 with respect to the second section 26. The securing member preferably comprises two securing members that include a pin 36 and a bolt 38 each extended through the

flanges 34. When inserted through aligned openings in the flanges 34, the front sides 20 of the first 24 and second 26 portions are aligned.

A rod 40 for removably receiving a tire 9 is attached to the pole 18
5 and extends outwardly away from the front side 20 of the pole 18. The rod
40 is positioned on the second portion 26 of the pole 18 and is ideally
threaded. A plate 42 has an aperture 44 extending therethrough for
removably receiving the rod 40. The aperture 44 is centrally disposed on
the plate 42, and the plate 42 has a generally circular shape. The plate 42
10 has a diameter greater than a diameter of a conventional wheel hub
opening. A threaded locking member 46 is selectively positionable on the
rod 40. The tire 9 may be positioned on the rod 40, the plate 42 positioned
adjacent to the tire 9 and the locking member 46 positioned on the rod 40
for locking the plate 42 in abutment with the tire 9.

15

A support 48 is attached to the front side 20 of the pole 18 and
extends away therefrom. The support 48 is positioned on the second
portion 26 and generally adjacent to the break. The support 48 is
positioned for supporting a weight of the tire 9 when the tire 9 is
20 positioned on the rod 40. A guard 50 is selectively extended into an upper
end of the pole 18. The guard 50 has a bend 52 therein such that the guard
50 extends over the tire 9 when the tire 9 is positioned on the rod 40.

A rigid panel 54 is attached to the back side 22 of the pole 18. The
25 rigid panel 54 acts as a step when the second portion 26 is in a generally
horizontal position as shown in Figure 4. The step is used for retrieving
items from a pick-up bed.

In use, the apparatus 10 allows a the owner of a pick-truck to mount
30 a spare tire 9 on a conventional trailer hitch 8 so that the spare tire 9 does
not use a large portion of the bed of the pick-up truck. The pole 18 is

rotatable to allow for movement of the tire 9 when space is needed due to a trailer being attached to the female hitch coupler 14.

With respect to the above description then, it is to be realized that
5 the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be
10 encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to
15 limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.